

## REMARKS

This Amendment responds to the final Office Action mailed on November 14, 2008. Claims 1-7, 11-15, 17, and 18 are pending. Claims 1, 11-13, 15 and 17 have been amended. Claims 8-10, 16, 19, and 20 have been canceled. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

### Rejection of Claims under 35 U.S.C. § 102

Claims 1, 5, 6, 18, and 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,251,216 to Okamura et al. (hereinafter *Okamura*). Applicants respectfully traverse the rejection.

The Examiner contends in the Office Action that Fig 1 of *Okamura* shows a plasma processing apparatus 12 comprising a first electrode 13, a second electrode 11, and a separating member 25 defining a sidewall between the first and second electrodes 11, 13. Claim 1, as amended, sets forth “an electrically conductive shell surrounding said first electrode, said second electrode, and said separating member” and “an atmospheric pressure space between said shell and said first electrode, said second electrode, and said separating member”.

In *Okamura*, the electrode 13 identified by the Examiner resides entirely inside the reaction chamber 10. The electrode is not separated from the interior surface of the reaction chamber 10 by an atmospheric pressure space.

For a reference to anticipate the invention in a claim, the reference must teach each and every element in the precise arrangement set forth in the claim. If the reference fails to teach even one of the claimed elements, the reference does not and cannot anticipate the claimed invention. *Okamura* fails to teach “an electrically conductive shell surrounding said first electrode”, and “an atmospheric pressure space between said shell and said first electrode”, as set forth in claim 1. Therefore, Applicants respectfully request that the rejection of independent claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Independent claim 1 is patentable for additional reasons.

Specifically, the separating member 25 identified by the Examiner also resides entirely inside the reaction chamber 10 as a liner positioned as a layer on the interior surface of the reaction chamber 10. The separating member 25 is not separated from the interior surface of the reaction chamber 10 by an atmospheric pressure space. For this additional reason, *Okamura* fails to teach “an electrically conductive shell surrounding … said separating member” and “an atmospheric pressure space between said shell and … said separating member”. Hence, Applicants respectfully request that the Examiner withdraw the rejection of independent claim 1 under 35 U.S.C. § 102(b).

*Okamura* also fails to teach “a vacuum port in said first electrode for evacuating said processing region to a sub-atmospheric pressure suitable for generating the plasma from the process gas in said processing region”. The second electrode 11 identified by the Examiner does not include a vacuum port. Instead, the reaction chamber 10 is evacuated through a separate vacuum port 22 located in the sidewall of the reaction chamber 10. For this additional reason, Applicants respectfully request that the rejection be withdrawn.

Because claims 5, 6, and 18 depend from independent claim 1, Applicants submit that *Okamura* fails to anticipate these claims for at least the same reasons as claim 1. Furthermore, these dependent claims recite unique combinations of elements not disclosed or suggested by *Okamura*.

### **Rejection of Claims under 35 U.S.C. § 103**

#### **Claims 2, 3, 8, 9, 10, and 19 over Okamura in view of Shan**

Claims 2, 3, 8, 9, 10, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okamura* in view of U.S. Patent No. 5,891,350 to Shan et al. (hereinafter *Shan*). *Shan* fails to cure the deficiencies of *Okamura*. Hence, each of these claims, other than canceled claims 8-10 and 19, is patentable for at least the same reasons as independent claim 1. Furthermore, each of these dependent claims recites a unique combination of elements not disclosed or suggested by *Okamura* in view of *Shan*.

Claims 15-17 over Okamura in view of Suntola, and Maher

Claims 15-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okamura* in view of U.S. Patent No. 5,711,811 to Suntola et al. (hereinafter *Suntola*) and further in view of U.S. Patent No. 4,381,965 to Maher, Jr., et al. (hereinafter *Maher*). Claim 15 is the sole independent claim subject to this ground of rejection. Applicants traverse the rejection.

Independent claim 15 recites “a vacuum port in said first electrode for evacuating said first and second processing regions to a sub-atmospheric pressure suitable for generating the plasma from the process gas in said first processing region and said second processing region”, “an electrically conductive shell surrounding said first electrode, said second electrode, said third electrode, said first separating member, and said second separating member”, and “an atmospheric pressure space between said shell and said first electrode, said second electrode, said third electrode, said first separating member, and said second separating member”.

With regard to similar recitations in claim 1, the deficiencies of *Okamura* are discussed above in conjunction with the traversal of the rejection of claim 1. *Suntola* and *Maher*, whether considered individually or collectively, fail to remedy these deficiencies of *Okamura*.

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness because these deficiencies in comparison with claim 15 evidence a failure to resolve the *Graham* factual inquiries. For this reason, Applicants request that the Examiner withdraw the rejection.

Independent claim 15 is patentable for additional reasons.

According to MPEP § 2142, the Examiner bears the initial burden of factually supporting a *prima facie* conclusion of obviousness. If the Examiner fails to produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. MPEP § 2143 sets forth that the Examiner is compelled to provide a “clear articulation of the reason(s) why the claimed invention would have been obvious”. MPEP § 2143 provides multiple examples of such clear articulations.

The totality of the Examiner’s allegedly objective rationale to combine *Suntola* with *Okamura* and then to combine *Maher* with the combination of *Suntola* with *Okamura*, as stated on page 13 of the Office Action, is “processing plural substrates for greater through-put”. This

bears no rational resemblance to the multiple examples of clear articulations provided in MPEP § 2143. In fact, Applicants submit that the Examiner’s analysis is so lacking as to not provide a clear articulation that satisfies the initial burden to factually support a *prima facie* conclusion of obviousness that would shift the burden to the Applicants for a reasoned response. For at least these additional reason, Applicants submit that the Examiner has failed to establish *prima facie* obviousness. Therefore, Applicants request that the Examiner withdraw the rejection of independent claim 15.

Because claim 17 depends from independent claim 15, Applicants submit that these claims are also patentable for at least the same reasons discussed above. Furthermore, these dependent claims recite unique combinations of elements not disclosed or suggested by the combined disclosures of *Okamura*, *Suntola*, and *Maher*.

*Claims 4, 7, and 11-14 over Okamura in view of Shan and Hirooka*

Claims 4, 7, and 11-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okamura* in view of *Shan* and further in view of U.S. Patent No. 6,700,089 to *Hirooka* (hereinafter *Hirooka*). *Hirooka* and *Shan* fail to remedy the deficiencies of *Okamura*. Hence, Applicants submit that these dependent claims are patentable for at least the same reasons as independent claims 1 and 15. Furthermore, dependent claims 4, 7, and 11-14 recite unique combinations of elements not disclosed or suggested by *Okamura* in view of *Shan* and *Hirooka*.

**Conclusion**

Applicants have made a bona fide effort to respond to each and every requirement set forth in the Office Action. In view of the foregoing amendments and remarks, this application is submitted to be in complete condition for allowance. Accordingly, a timely notice of allowance to this effect is earnestly solicited. In the event that any issues remain outstanding, the Examiner is invited to contact the undersigned to expedite issuance of this application.

Applicants do not believe any fees are due in connection with filing this communication other than a fee for a Request for Continued Examination. However, if such petition is due or

any fees are necessary, the Commissioner may consider this to be a request for such and is hereby authorized to charge any under-payment or fees associated with this communication, or to credit any over-payment, to Deposit Account No. 23-3000.

Respectfully submitted,

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